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APPLICANT : MITSUBISHI ALUM CO LTD;

INVENTOR : TOMA KEN;

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TITLE : ALUMINUM BRAZING SHEET FOR HEAT EXCHANGER

ABSTRACT : PURPOSE: To improve the pitting corrosion resistance of the title sheet in a severe corrosive environment and to prevent the deterioration of its strength caused by thinning by specifying the compsn. of an Al alloy in a core material on which a brazing filter metal made of an Al-Si series alloy is pasted and that in a surface material.

CONSTITUTION: The Al brazing sheet is formed with a core material constituted of, by weight, 0.1 to 0.6% Cu, 0.2 to 0.6% Mg, 0.3 to 1.5% Mn, $0.3 \leq \text{Si} < 0.6$ and the balance Al, a surface material constituted of 0.2 to 1.0% Mg, 0.1 to 1.0% Zn and the balance Al and a brazing material made of an Al-Si series alloy pasted on the other face of the core material. The above brazing filter metal may furthermore be pasted on both faces of the core material. In the above core material, Cu is needed by the lower limit or above to improve the strength of the alloy and to make it noble electrochemically, but the corrosion resistance is deteriorated in the case of the lower limit or above. Mn is needed by the lower limit or above to improve the high temp. strength, but the workability is deteriorated in the case of the lower limit or above. Both Si and Mg are needed by the lower limit or above to improve the strength after brazing, but the high temp. strength is drastically deteriorated in the case of the lower limit or above.

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